improvement with a clear increase in cardiac output and decrease in PCWP. Levosimendan was associated with significantly improved dyspnea and a trend towards improved fatigue. Intensive care unit stay in levosimendan group is 1 day shorter than that of the standard treatment group. This shows that the hospitalization costs may be reduced by adopting levosimendan treatment.

Evaluation of the role of multiple biomarkers in short term prognosis of heart failure patients

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Background: The aim of the study was to evaluate the role of multiple biomarkers in short term prognosis of heart failure patients.
Methods: One hundred cases of heart failure diagnosed by Framingham's criterion were taken up. Detailed history, clinical examination and echocardiographic analysis were done in each patient. On the day of admission BNP, cTNT, cystatin C and NGAL levels were estimated. Based on level of each biomarkers, the patients were divided in two groups for prognostication purpose for each biomarkers. BNP(> 300pg/ml vs < 300 pg/ml), cTNT (> 0.03 ng/ml vs <0.03ng/ml and NGAL(> 140mg/l vs <140mg/l) Patients were followed up for ten days. Improvement or deterioration in symptoms and NYHA class were noted. Mortality if any was also noted.
Results: It was observed that there is positive correlation between clinical deterioration/ mortality and individual levels of BNP, cTNT and cystatinC based on pre selected cut off value. Combination of BNP, cTNT and cystatin C all three levels above the cut off value was associated with 62% of patients showing deterioration compared to 16% in all these below cut off. Similarly, patients with combined BNP and cystatin C elevation showed 55% vs 23 % and BNP and cTNT combined showed 60% vs 28% deterioration in clinical symptoms.
Conclusions: Combination of BNP, cTNT and Cystatin C is better in predicting short term outcome in patients of heart failure than individual biomarkers.

Prevalence of anaemia in chronic heart failure and contribution of Iron deficiency and renal dysfunction as underlying cause

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Background: There is growing evidence that anaemia is common in CHF and may contribute to the high morbidity and mortality associated with this condition. However, considerable disagreement exists about the prevalence of anemia in CHF patients, with prevalence rates varying from 9.9% to 55.6%.
Objective: To find the Prevalence of Anaemia in chronic heart failure and Contribution of Iron deficiency and Renal dysfunction as underlying cause.
Methods: We studied 200 patients. All the patients were NYHA class III or IV, 82% being class IV. Haemoglobin concentration of 11 g/dl or less was selected as our cut-off for anaemia. This group was further subdivided into microcytic, normocytic, and macrocytic anaemia. In each of these groups it was noted if any patients had renal impairment (creatinine >1.5mg/dl) and whether ferritin was low (<15mcg/l).
Results: Seventy of the 200 patients (35%) selected had a mean haemoglobin concentration of < 11 g/dl. Of these 70 patients, 20(28.6%) were microcytic, 41(58.6%) were normocytic and 9(12.8%) were macrocytic. In microcytic group, ferritin was low in 12(17.1%) and renal impairment were in 5(7.1%) patients. In normocytic group, ferritin was low in 7(10%) and renal impairment were in 23(32.8%) patients. In macrocytic group, ferritin was low in 2(2.8%) and renal impairment were in 4 (5.7%) patients. As a whole, renal impairment was present in 32 patients (45.7%) and low ferritin was present in 21(30%) patients. The prevalence of anemia increased from 17.72 % in those with a serum creatinine of < 1.5 mg/dl to 87.5% in those with a serum creatinine of >2.5 mg%.
Conclusion: Anemia is a common finding in patients hospitalized with CHF and significant numbers of anaemic CHF patients have some degree of renal insufficiency or iron deficiency.

Management and outcome of anthracycline cardiomyopathy

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Background: The gain in life expectancy due to anthracycline therapy might be countered by increased mortality due to cardiotoxicity. The natural history of anthracycline induced cardiomyopathy (AC-CMP) , remains poorly defined.
Objective: To study clinical profile of patients with AC-CMP and response to heart failure (HF) therapy.
Methods: This is an analysis of prospectively collected data of patients with a left ventricular ejection fraction (LVEF) ≤50 % due to AC-CMP seen at a tertiary cancer centre in India .Patients with a minimum follow up of 6 months, a baseline 2Decho,and at least three 2Dechos after diagnosis of AC-CMP were included. Demographic details, co morbidities, cancer diagnosis and treatment details including dose of anthracycline, treatment for CMP and response to treatment (ACE inhibitors, beta blockers and or digoxin) were recorded. Patients were considered responders and nonresponders according to recovery in LVEF. Univariate and multivariate analysis of effect of predictor variables on response to treatment was done. Analyses were performed using PASW software package (version 18).
Results: 55 patients newly diagnosed with AC-CMP were registered in 2010-2012. The median dose of doxorubicin was 300mg/m2. Seven patients had received doxorubicin <= 180 mg/m2. Nine patients (16.4%) presented with grade 4 cardiotoxicity and two patients (3.6%) with grade 5. Median duration from last dose of chemotherapy to development of AC-CMP was 5 months. The median follow up duration was 15 months. 30 (54.5%) were responders. Age, co morbidities, mediastinal/left chest radiation, doxorubicin dose, time to development of AC CMP did not affect the response to treatment in univariate analysis. There was a higher chance of non response in patients who received doxorubicin more than 200mg/m2 (37%) and patients with grade 4